

REMARKS/ARGUMENTS

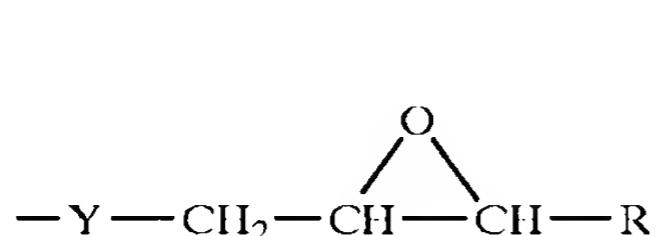
Claim 1 has been amended to place the term “Figure 1:” above the intended Figure, consistent with the description of Figures 2 and 3 in the Claim. No new matter has been entered.

The rejections under 35 U.S.C. 112 are traversed. The specification does disclose to one of ordinary skill in the art at the time the invention was made that Y is -CO'O-.

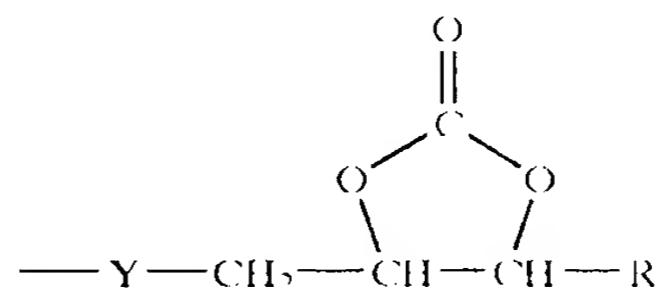
With regard to Formulae (2) and (3), specification page 8, lines 13-15 explicitly states:

In each of the formulas (2) and (3), Y which represents a connecting group can preferably be a -CO'O- or -O- group.

(emphasis added). Formula (1), as noted in Claim 1, is obtained by reacting carbon dioxide with a (co)polymer represented by Formula (2) or with a monomer represented by formula (3). See also paragraph [0013] of the specification at page 7. This reaction of carbon dioxide (CO₂) with Formulae (2) and (3) occurs at the epoxy groups of these Formulae, as explained at specification page 9, paragraph [0016], to provide the 5-membered cyclocarbonato ring group of Formula (1):



Detail from Formulae (2) and (3)



Formula (1)

Thus, and as clearly described in both the original specification and claims, the Y group in all of Formulae (1) – (3) can be -CO'O-, and the rejection under 35 U.S.C. 112 should be withdrawn.

Similarly, the rejection over Yoshida in view of Figovsky should be withdrawn.

As recognized in the rejection itself, Yoshida does not disclose a (co)polymer comprising at least one cyclocarbonato group represented by formula (1), or a (co)polymer obtained by (co)polymerizing a monomer comprising at least one cyclocarbonato group represented by formula (1), as claimed. To make up for this deficiency, Figovsky is cited. However, in Figovsky the “Y” group (as that variable is used herein) is not -CO' O-. This is perhaps most easily explained by comparison of the Figovsky polymer to the present invention as represented by the polymer component of Example 1(1) described at specification pages 35ff.

At first, in Example 1(1) glycidyl methacrylate (GMA; Fig. 1)

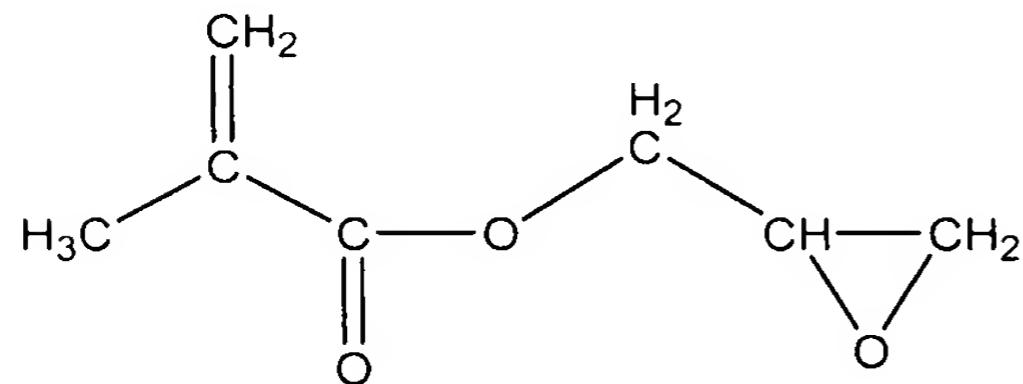


Fig. 1 Glycidyl methacrylate

is polymerized to yield polyglycidyl methacrylate (PGMA; Fig. 2):

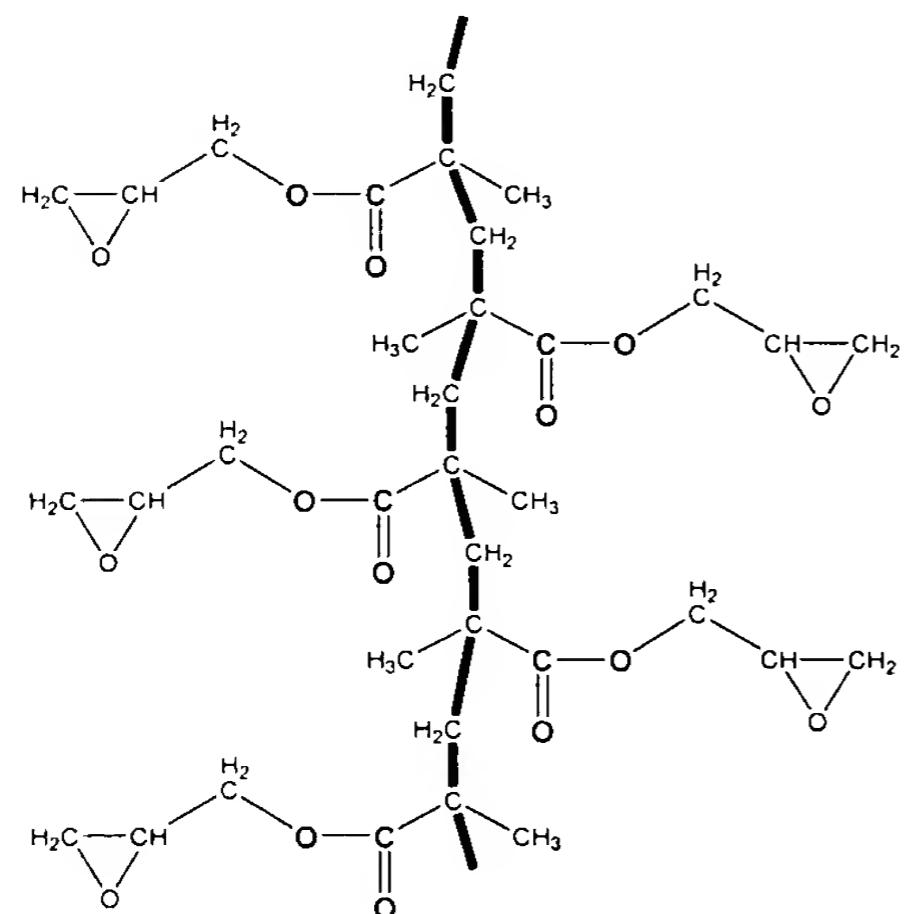


Fig. 2 Polyglycidyl methacrylate (PGMA)

Subsequently, the PGMA is subjected to a reaction with carbon dioxide. As a result, cyclocarbonatopropyl methacrylate (CCPMA) polymer (Fig. 3) is yielded.

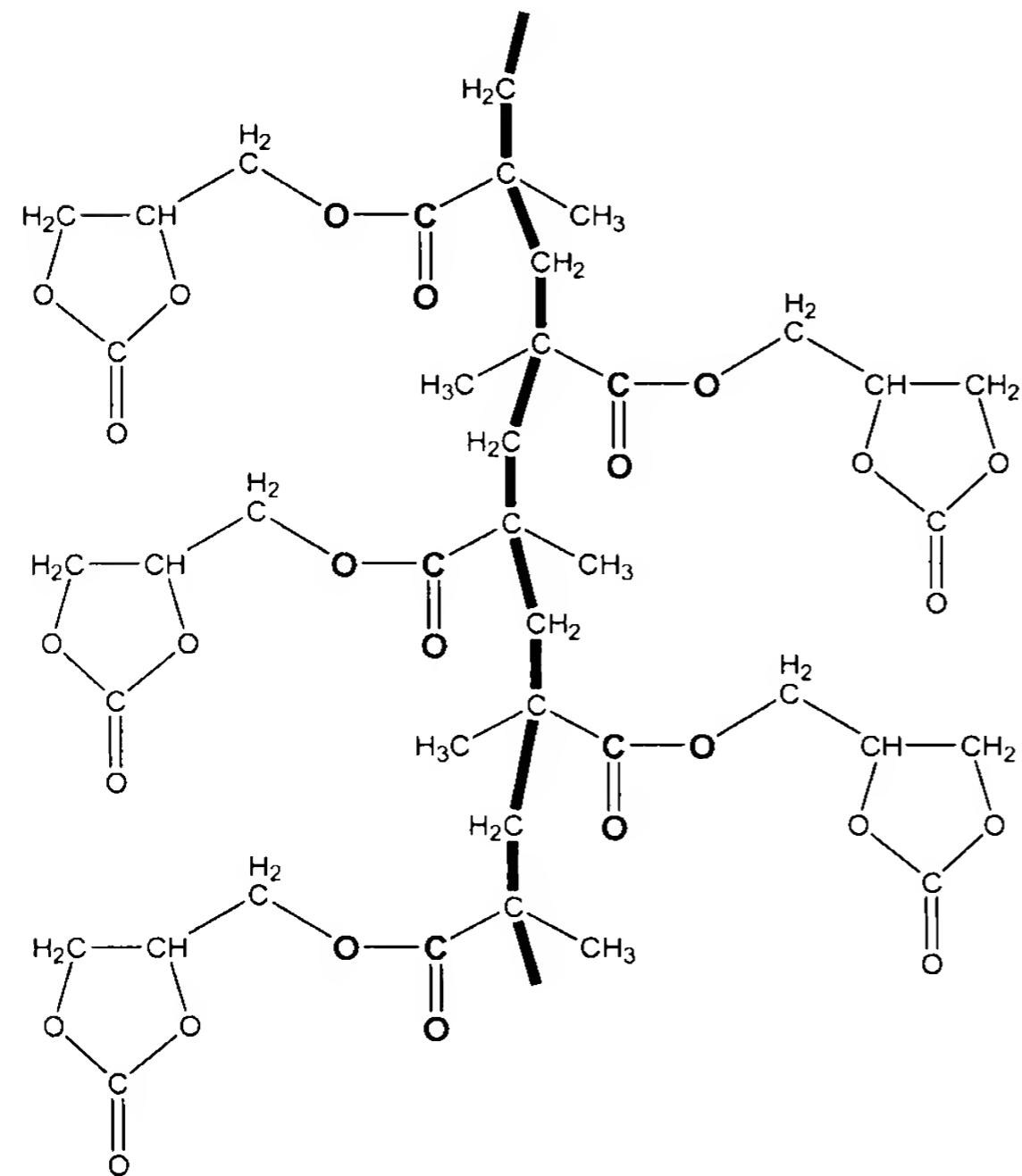
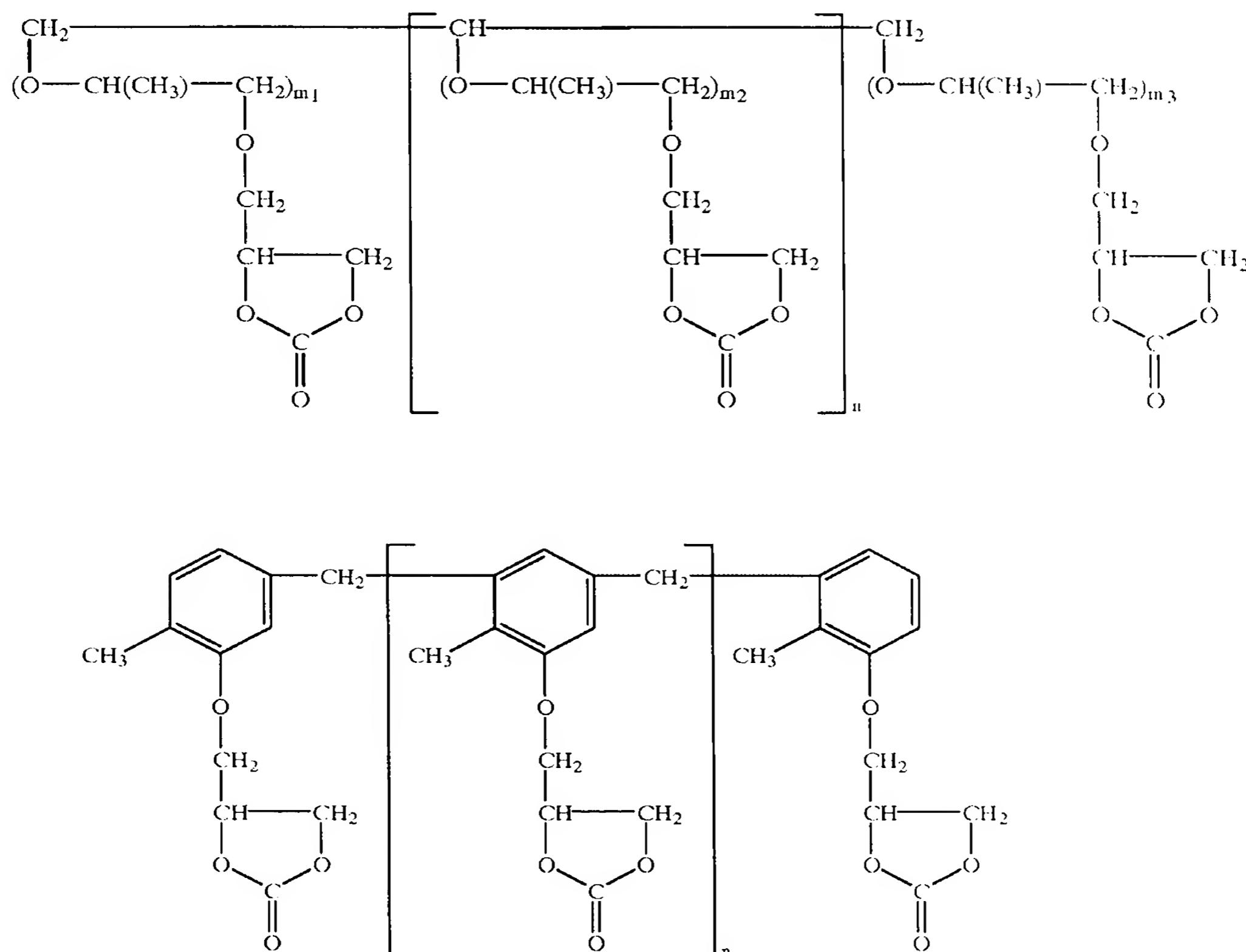


Fig. 3 Cyclocarbonatopropyl methacrylate (CCPMA) polymer

where this CCPMA polymer corresponds to polymer component (A-1) in present claim 1.

Figovsky discloses a polyurethane network formed of the following materials (see col. 6 of the reference):



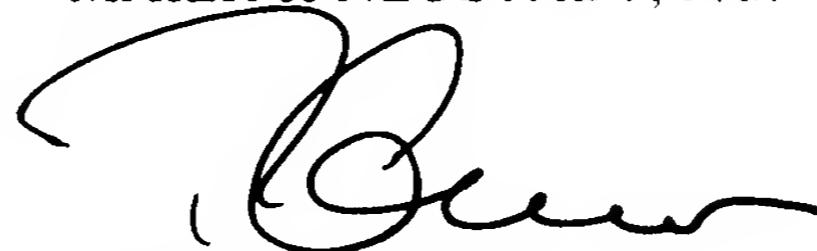
using simple polyalkyloxide "Y" groups. In contrast, in each of Formulae (1) - (3) as recited in claim 1 of the present application, the connecting group Y is -CO'O-. Figovsky does not disclose any -CO'O- group as a connecting group, as readily envisaged from the above Figures and a complete appreciation of the reference, and thus does not make up for that lacking in Yoshida.

Application No. 10/624,671
Reply to Office Action of September 4, 2007

Accordingly, and in view of the differences between what is claimed herein and what is disclosed by the combination of Yoshida and Figovsky, Applicants respectfully request the reconsideration and withdrawal of the outstanding rejection and the passage of this case to Issue.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Richard L. Treanor
Attorney of Record
Registration No. 36,379

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 06/04)